IN THE CLAIMS

1. (Withdrawn) A pharmaceutical composition for the treatment or amelioration of central nervous system dependent conditions comprising (i) an effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof and (ii) a pharmaceutically acceptable carrier.

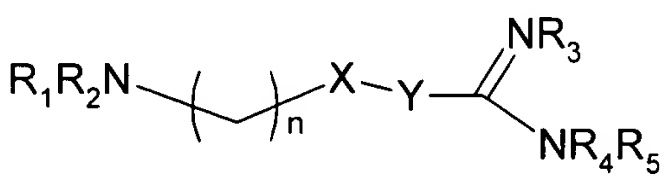
2. (Withdrawn) The pharmaceutical composition according to claim 1 comprising a dose of about 0.1 mg/kg to about 300 mg/kg of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof.

3. (Withdrawn) The pharmaceutical composition according to claim 1 comprising a dose of about 1 mg/kg to about 50 mg/kg of agmatine, or a pharmaceutically acceptable salt thereof.

4. (Withdrawn) The pharmaceutical composition according to claim 2 comprising saline as the pharmaceutical carrier.

5. (Previously amended) A method of treating, ameliorating, or preventing seizures associated with epilepsy in a subject in need thereof, the method comprising:

administering a pharmaceutical composition comprising about 0.1 to about 500 mg of agmatine or an agmatine analog , or a pharmaceutically acceptable salt thereof per kilogram of the subject's weight to treat, reduce, or prevent seizures associated with epilepsy in the subject, wherein the agmatine analog has the following formula



wherein n is 0 to about 10;

R_1, R_2, R_3, R_4, and R_5, are each independently, or any combination thereof: hydrogen, hydroxy, substituted or unsubstituted C_{1-10} alkyl, substituted or unsubstituted C_{3-8} cycloalkyl, substituted or unsubstituted arylalkyl (comprising Ar-$(CH_2)_m$; where Ar is aromatic and m is 0 to about 10) substituted or unsubstituted C_{1-10} alkoxyl, substituted or unsubstituted C_{1-10} acyl, halogeno, amido, phenyl, thio, or amino; and

X and Y are each independently: O, NH, CH_2, CF_2, Se, C=O, C=N, or C=S, or X-Y together is HC=CH, C≡C, N=N, N=CH, CH=N, or a saturated or unsaturated ring.

6. (Canceled)

7. (Original) A method according to claim 5, wherein the pharmaceutical composition comprises agmatine or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier.

8. (Canceled).

9. (Previously amended) A method according to claim 8, wherein the composition is administered in a dose of about 0.1 to about 50 mg/kg per day indefinitely or until seizures associated with the epilepsy.

10. (Canceled).

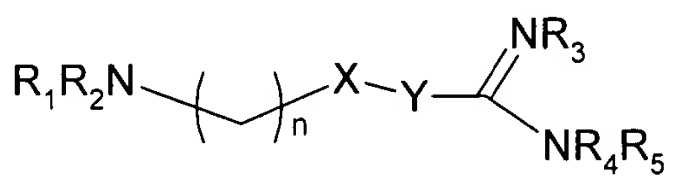
11. (Previously amended) A method according to claim 5, comprising preventing or reducing seizure activity.

12. (Canceled).

13. (Previously amended) A method of treating or preventing seizures associated with epilepsy in a human comprising:

identifying a human subject in need of said treatment or prevention; and

administering about 0.1 to about 500 mg of agmatine or an agmatine analog , or a pharmaceutically acceptable salt thereof per kilogram of the subject's weight to the human subject, wherein the agmatine analog has the following formula



wherein n is 0 to about 10;

R_1, R_2, R_3, R_4, and R_5, are each independently, or any combination thereof: hydrogen, hydroxy, substituted or unsubstituted $C_{1\text{-}10}$ alkyl, substituted or unsubstituted $C_{3\text{-}8}$ cycloalkyl, substituted or unsubstituted arylalkyl (comprising Ar-$(CH_2)_m$; where Ar is aromatic and m is 0 to about 10) substituted or unsubstituted $C_{1\text{-}10}$ alkoxyl, substituted or unsubstituted $C_{1\text{-}10}$ acyl, halogeno, amido, phenyl, thio, or amino; and

X and Y are each independently: O, NH, CH_2, CF_2, Se, C=O, C=N, or C=S, or X-Y together is HC=CH, C≡C, N=N, N=CH, CH=N, or a saturated or unsaturated ring.

14. (Original) A method according to claim 13, comprising identifying a human subject in need of said treatment by analyzing an electroencephalogram taken of the human subject.

15. (Previously amended) A method according to claim 13, comprising identifying a human subject in need of said treatment by observing the occurrence of a seizure in said subject.

16. (Previously amended). A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof to the human subject indefinitely or until the seizures associated with epilepsy cease.

17. (Previously amended) A method according to claim 13, comprising preventing or reducing seizures associated with epileptic activity.

18. (Original) A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof as a pharmaceutical composition.

19. (Original) A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof parenterally.

20. (Original). A method according to claim 13, comprising administering the effective amount of agmatine, an agmatine analog or a pharmaceutically acceptable salt thereof orally.